# Statement of Basis of the Federal Operating Permit

Enstor Katy Storage and Transportation, L.P.

Site Name: Enstor Katy Storage and Transportation LP Physical Location: 25959 Westheimer Pkwy Nearest City: Katy County: Fort Bend

> Permit Number: O3312 Project Type: Renewal

Standard Industrial Classification (SIC) Code: 4922 SIC Name: Natural Gas Transmission

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;

A basis for applying permit shields:

A list of the federal regulatory applicability determinations;

A table listing the determination of applicable requirements;

A list of the New Source Review Requirements;

The rationale for periodic monitoring methods selected;

The rationale for compliance assurance methods selected:

A compliance status; and

A list of available unit attribute forms.

Prepared on: May 8, 2017

### Operating Permit Basis of Determination

### **Permit Area Process Description**

Enstor's natural gas storage facility consists of approximately 20 miles of pipeline, a depleted natural gas reservoir, and a gas compression facility located on an 82-acre site owned by Enstor. The site is located approximately 2 miles southeast of Katy, Texas and receives sweet, pipeline-quality, natural gas from various natural gas transmission pipelines in the area. Natural gas enters the facility via a low pressure header system during gas transfer, injection, and withdrawal modes of operation.

Transfer mode- gas can be compressed into the header and then out of the station without going into storage. Injection mode- all gas is compressed before being injected into the reservoir for storage. Withdrawal mode- compression is not normally required during this mode.

The station is most often operated without compression under "free flow transfer" however the facility can be operated under any combination of the above mentioned modes with requirements for compression varying to meet the demand.

Depending on the mode of operation gas volumes entering the station can vary between 0 and 750 million standard cubic feet per day. The natural gas is typically composed of methane and small amounts of higher carbon gases, nitrogen, and carbon dioxide.

There are 10 natural gas fired compressor engines and one electric-driven compressor at the facility. When gas is withdrawn from the reservoir, water is removed via one of two Triethylene Glycol (TEG) dehydrators before the gas leaves via pipeline. Most facility process vents and blowdowns are discharged through a ground-level, non-assisted process flare. The facility is also equipped with a natural gas driven emergency electric generator which can provide electricity in the event of power interruptions.

### **FOPs at Site**

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

### **Major Source Pollutants**

The table below specifies the pollutants for which the site is a major source:

| Major Pollutants VO | VOC, NOX |
|---------------------|----------|
|---------------------|----------|

### Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - o Additional Monitoring Requirements
  - o New Source Review Authorization Requirements
  - Compliance Requirements
  - o Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - o Additional Monitoring Requirements
  - Permit Shield
  - o New Source Review Authorization References
  - Compliance Plan
  - o Alternative Requirements
- Appendix A
  - Acronym list

### General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

### Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

### Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number,"

detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

### Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

# Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the

opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

### **Federal Regulatory Applicability Determinations**

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

| Regulatory Program   | Applicability<br>(Yes/No) |
|--|---------------------------|
| Prevention of Significant Deterioration (PSD)  | No                        |
| Nonattainment New Source Review (NNSR)   | No                        |
| Minor NSR  | Yes                       |
| 40 CFR Part 60 - New Source Performance Standards                                      | Yes                       |
| 40 CFR Part 61 - National Emission Standards for<br>Hazardous Air Pollutants (NESHAPs) | No                        |
| 40 CFR Part 63 - NESHAPs for Source Categories   | Yes                       |
| Title IV (Acid Rain) of the Clean Air Act (CAA)  | No                        |
| Title V (Federal Operating Permits) of the CAA   | Yes                       |
| Title VI (Stratospheric Ozone Protection) of the CAA                                   | No                        |
| CSAPR (Cross-State Air Pollution Rule)   | No                        |

### **Basis for Applying Permit Shields**

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests

that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

### **Insignificant Activities**

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

- 1. Office activities such as photocopying, blueprint copying, and photographic processes.
- 2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
- 3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
- 4. Outdoor barbecue pits, campfires, and fireplaces.
- 5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
- 6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
- 7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
- 8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
- 9. Vehicle exhaust from maintenance or repair shops.
- 10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
- 11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
- 12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
- 13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 15. Well cellars.
- 16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
- 17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
- 18. Equipment used exclusively for the melting or application of wax.
- 19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
- 20. Shell core and shell mold manufacturing machines.
- 21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
- 22. Equipment used for inspection of metal products.
- 23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
- 24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
- 25. Battery recharging areas.
- 26. Brazing, soldering, or welding equipment.

### **Determination of Applicable Requirements**

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at <a href="https://www.tceq.texas.gov/permitting/air/nav/air\_all\_ua\_forms.html">www.tceq.texas.gov/permitting/air/nav/air\_all\_ua\_forms.html</a>.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at <a href="https://www.tceq.texas.gov/permitting/air/nav/air\_supportsys.html">www.tceq.texas.gov/permitting/air/nav/air\_supportsys.html</a>. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

### Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

## **Determination of Applicable Requirements**

| Unit ID | Regulation                          | Index Number | Basis of Determination*  |
|---------|-------------------------------------|--------------|--|
| COMP 14 | 30 TAC Chapter 117,<br>Subchapter B | R117         | Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter permit 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).   |
|         |                                     |              | NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9)  |
|         |                                     |              | CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 3 g/hp-hr option   |
|         |                                     |              | CO Averaging Method = Complying with the applicable emission limit using a block one-hour average.   |
|         |                                     |              | CO Monitoring System = Emissions monitored by means other than a CEMS or PEMS.   |
|         |                                     |              | EGF System Cap Unit = Engine is not used as an electric generating facility to generate electricity for sale to the electric grid.   |
|         |                                     |              | Type of Service = SRIC engine not meeting an exemption   |
|         |                                     |              | Fuel Fired = Natural gas   |
|         |                                     |              | NOx Averaging Method = Complying with the applicable emission limit using a block one-hour average.  |
|         |                                     |              | Engine Type = Lean-burn  |
|         |                                     |              | NOx Reduction = None   |
|         |                                     |              | NOx Monitoring System = Maximum emission rate testing in accordance with 30 TAC § 117.8000   |
| COMP 14 | 40 CFR Part 63, Subpart ZZZZ        | 63ZZZZ       | HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.   |
|         |                                     |              | Brake HP = Stationary RICE with a brake HP greater than 500 HP.  |
|         |                                     |              | Operating Hours = The stationary RICE is operated more than 24 hours per calendar year.  |
|         |                                     |              | Performance Test = A performance test has been previously conducted that meets the conditions in 40 CFR § 63.6610(d)(1)-(5).   |
|         |                                     |              | Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.  |
|         |                                     |              | Control Technique = Control technique other than non-selective catalytic reduction   |
|         |                                     |              | Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies.   |
|         |                                     |              | Emission Limitation = Reducing carbon monoxide emissions from the stationary RICE  |
|         |                                     |              | Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.           |
|         |                                     |              | Operating Limits = Using the control techniques approved in Subpart ZZZZ   |
|         |                                     |              | Monitoring System = The owner or operator has installed a system to shutdown the engine when the catalyst inlet temperature exceeds 1350°F.  |
|         |                                     |              | Service Type = Normal use.   |
|         |                                     |              | Stationary RICE Type = 4 stroke spark ignited lean burn engine.  |
| GEN-1   | 30 TAC Chapter 117,<br>Subchapter B | R117         | Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] |
|         |                                     |              | Fuel Fired = Natural gas   |
| GEN-1   | 40 CFR Part 63, Subpart ZZZZ        | 63ZZZZ       | HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR §   |

| Unit ID          | Regulation                          | Index Number | Basis of Determination*  |
|------------------|-------------------------------------|--------------|--|
|                  |                                     |              | 63.2.  |
|                  |                                     |              | Brake HP = Stationary RICE with a brake HP greater than 500 HP.  |
|                  |                                     |              | Operating Hours = The stationary RICE is operated less than 24 hours per calendar year.  |
|                  |                                     |              | Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.  |
|                  |                                     |              | Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.   |
|                  |                                     |              | Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). |
|                  |                                     |              | Stationary RICE Type = 4 stroke spark ignited rich burn engine   |
| GRP-<br>COMPS1-9 | 30 TAC Chapter 117,<br>Subchapter B | R117         | Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter permit 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).   |
|                  |                                     |              | NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9)  |
|                  |                                     |              | CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 3 g/hp-hr option   |
|                  |                                     |              | CO Averaging Method = Complying with the applicable emission limit using a block one-hour average.   |
|                  |                                     |              | CO Monitoring System = Emissions monitored by means other than a CEMS or PEMS.   |
|                  |                                     |              | EGF System Cap Unit = Engine is not used as an electric generating facility to generate electricity for sale to the electric grid.   |
|                  |                                     |              | Type of Service = SRIC engine not meeting an exemption   |
|                  |                                     |              | Fuel Fired = Natural gas   |
|                  |                                     |              | NOx Averaging Method = Complying with the applicable emission limit using a block one-hour average.  |
|                  |                                     |              | Engine Type = Lean-burn  |
|                  |                                     |              | NOx Reduction = None   |
|                  |                                     |              | NOx Monitoring System = Maximum emission rate testing in accordance with 30 TAC § 117.8000   |
| GRP-<br>COMPS1-9 | 40 CFR Part 63, Subpart ZZZZ        | 63ZZZZ       | HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.   |
|                  |                                     |              | Brake HP = Stationary RICE with a brake HP greater than 500 HP.  |
|                  |                                     |              | Operating Hours = The stationary RICE is operated more than 24 hours per calendar year.  |
|                  |                                     |              | Performance Test = A performance test has been previously conducted that meets the conditions in 40 CFR $\S$ 63.6610(d)(1)-(5).  |
|                  |                                     |              | Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.  |
|                  |                                     |              | Control Technique = Control technique other than non-selective catalytic reduction   |
|                  |                                     |              | Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies.   |
|                  |                                     |              | Emission Limitation = Reducing carbon monoxide emissions from the stationary RICE  |
|                  |                                     |              | Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.   |
|                  |                                     |              | Operating Limits = Using the control techniques approved in Subpart ZZZZ   |
|                  |                                     |              | Monitoring System = The owner or operator has installed a system to shutdown the engine when the catalyst inlet temperature exceeds $1350$ °F.   |

| Unit ID | Regulation                     | Index Number | Basis of Determination*   |
|---------|--------------------------------|--------------|---|
|         |                                |              | Service Type = Normal use.  |
|         |                                |              | Stationary RICE Type = 4 stroke spark ignited lean burn engine.   |
| TANK1   | 30 TAC Chapter 115, Storage of | R5112        | Today's Date = Today's date is March 1, 2013 or later.  |
|         | VOCs                           |              | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. |
|         |                                |              | Tank Description = Tank using a submerged fill pipe   |
|         |                                |              | True Vapor Pressure = True vapor pressure is less than 1.0 psia   |
|         |                                |              | Product Stored = VOC other than crude oil or condensate   |
|         |                                |              | Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons  |
|         |                                |              | Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.             |
| TANK1   | 40 CFR Part 60, Subpart Kb     | 60Kb         | Product Stored = Volatile organic liquid  |
|         |                                |              | Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)   |
| TANK116 | 30 TAC Chapter 115, Storage of | R5112        | Today's Date = Today's date is March 1, 2013 or later.  |
|         | VOCs                           |              | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. |
|         |                                |              | Tank Description = Tank using a submerged fill pipe   |
|         |                                |              | True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia  |
|         |                                |              | Product Stored = Condensate prior to custody transfer.  |
|         |                                |              | Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 40,000 gallons  |
|         |                                |              | Control Device Type = Flare   |
|         |                                |              | Throughput = 15BBL- The liquid throughput is less than or equal to 1,500 barrels.   |
|         |                                |              | Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.             |
| TANK116 | 40 CFR Part 60, Subpart Kb     | 60Kb         | Product Stored = Petroleum (other than crude oil) or condensate stored, processed, and/or treated prior to custody transfer   |
|         |                                |              | Storage Capacity = Capacity is less than or equal to 420,000 gallons (1,589,874 liters)   |
| TANK4   | 30 TAC Chapter 115, Storage of | R5112        | Today's Date = Today's date is March 1, 2013 or later.  |
|         | VOCs                           |              | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. |
|         |                                |              | Product Stored = VOC other than crude oil or condensate   |
|         |                                |              | Storage Capacity = Capacity is less than or equal to 1,000 gallons  |
|         |                                |              | Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.             |
| TANK4   | 40 CFR Part 60, Subpart Kb     | 60Kb         | Product Stored = Volatile organic liquid  |
|         |                                |              | Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)   |

| Unit ID  | Regulation                                       | Index Number | Basis of Determination*   |
|----------|--|--------------|---|
| TANK5    | 30 TAC Chapter 115, Storage of                   | R5112        | Today's Date = Today's date is March 1, 2013 or later.  |
|          | VOCs   |              | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. |
|          |  |              | Product Stored = VOC other than crude oil or condensate   |
|          |  |              | Storage Capacity = Capacity is less than or equal to 1,000 gallons  |
|          |  |              | Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.             |
| TANK5    | 40 CFR Part 60, Subpart Kb                       | 60Kb         | Product Stored = Volatile organic liquid  |
|          |  |              | Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)   |
| TANK6    | 30 TAC Chapter 115, Storage of                   | R5112        | Today's Date = Today's date is March 1, 2013 or later.  |
|          | VOCs   |              | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. |
|          |  |              | Product Stored = VOC other than crude oil or condensate   |
|          |  |              | Storage Capacity = Capacity is less than or equal to 1,000 gallons  |
|          |  |              | Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.             |
| TANK6    | 40 CFR Part 60, Subpart Kb                       | 60Kb         | Product Stored = Volatile organic liquid  |
|          |  |              | Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)   |
| TANK7    | 30 TAC Chapter 115, Storage of                   | R5112        | Today's Date = Today's date is March 1, 2013 or later.  |
|          | VOCs   |              | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. |
|          |  |              | Tank Description = Tank using a submerged fill pipe   |
|          |  |              | True Vapor Pressure = True vapor pressure is less than 1.0 psia   |
|          |  |              | Product Stored = VOC other than crude oil or condensate   |
|          |  |              | Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons  |
|          |  |              | Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.             |
| TANK7    | 40 CFR Part 60, Subpart Kb                       | 60Kb         | Product Stored = Volatile organic liquid  |
|          |  |              | Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)   |
| LOADFUG  | 30 TAC Chapter 115, Loading and Unloading of VOC | R5211        | Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.                         |
|          |  |              | Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.   |
|          |  |              | Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.   |
|          |  |              | Transfer Type = Loading and unloading.  |
|          |  |              | True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.  |
|          |  |              | Daily Throughput = Loading less than 20,000 gallons per day.  |
| GRP-HTRS | 30 TAC Chapter 117,                              | R7300        | Unit Type = Other industrial, commercial, or institutional boiler.  |

| Unit ID   | Regulation                            | Index Number | Basis of Determination*   |
|-----------|---------------------------------------|--------------|---|
|           | Subchapter B                          |              | Maximum Rated Capacity = MRC is less than or equal to 2 MMBtu/hr.   |
| GRP-HTRS  | 40 CFR Part 60, Subpart D             | 60D          | Construction/Modification Date = After September 18, 1978.  Covered Under Subpart Da = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da.   |
|           |                                       |              | Changes to Existing Affected Facility = No change has been made to the existing fossil fuel-fired steam generating unit.  Heat Input Pate: Heat input rate is less than or equal to 250 MMRth (br (72 MM))  |
|           |                                       | _            | Heat Input Rate = Heat input rate is less than or equal to 250 MMBtu/hr (73 MW).  |
| GRP-HTRS  | 40 CFR Part 60, Subpart Db            | 60Db         | Construction/Modification Date = On or after November 25, 1986, and on or before July 9, 1997.<br>Heat Input Capacity = Heat input capacity is less than or equal to 100 MMBtu/hr (29 MW).                  |
| GRP-HTRS  | 40 CFR Part 60, Subpart Dc            | 60Dc         | Construction/Modification Date = After June 9, 1989 but on or before February 28, 2005.   |
|           |                                       |              | Maximum Design Heat Input Capacity = Maximum design heat input capacity is less than 10 MMBtu/hr (2.9 MW).  |
| OXIDIZER1 | 30 TAC Chapter 117,<br>Subchapter B   | R7300        | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration]. |
|           |                                       |              | Unit Type = Other industrial, commercial, or institutional boiler.  |
|           |                                       |              | Maximum Rated Capacity = MRC is greater than 2 MMBtu/hr but less than 40 MMBtu/hr.  |
|           |                                       |              | NOx Monitoring System = Maximum emission rate testing.  |
|           |                                       |              | Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).   |
|           |                                       |              | Chapter 116 Permit Limit = Emission limit in 30 TAC § 117.105 is greater than the NO_x_ emission limit in any 30 TAC Chapter 116 permit issued after June 9, 1993.  |
|           |                                       |              | CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.  |
|           |                                       |              | CO Monitoring System = Monitored by method other than CEMS or PEMS.   |
|           |                                       |              | EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.  |
|           |                                       |              | Fuel Type #1 = Natural gas.   |
|           |                                       |              | NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.   |
|           |                                       |              | NOx Reductions = No NO_x_ reduction.  |
| OXIDIZER1 | 40 CFR Part 60, Subpart D             | 60D          | Construction/Modification Date = After September 18, 1978.  |
|           |                                       |              | Covered Under Subpart Da = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da.   |
|           |                                       |              | Changes to Existing Affected Facility = No change has been made to the existing fossil fuel-fired steam generating unit.  |
|           |                                       |              | Heat Input Rate = Heat input rate is less than or equal to 250 MMBtu/hr (73 MW).  |
| OXIDIZER1 | 40 CFR Part 60, Subpart Db            | 60Db         | Construction/Modification Date = Modified after July 9, 1997, and on or before February 28, 2005.<br>Heat Input Capacity = Heat input capacity is less than or equal to 100 MMBtu/hr (29 MW).               |
| OXIDIZER1 | 40 CFR Part 60, Subpart Dc            | 60Dc         | Construction/Modification Date = After June 9, 1989 but on or before February 28, 2005.   |
| OAIDIZEKI | 40 CFK Part OU, Subpart DC            | OODC         | Maximum Design Heat Input Capacity = Maximum design heat input capacity is less than 10 MMBtu/hr (2.9 MW).  |
| FLARE1    | 30 TAC Chapter 111, Visible Emissions | R1111        | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.   |

| Unit ID   | Regulation  | Index Number | Basis of Determination*   |
|-----------|---|--------------|---|
|           |   |              | Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.  |
| FLARE1    | 40 CFR Part 60, Subpart A                             | 60A          | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.   |
|           |   |              | Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR $\S$ 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR $\S$ 60.18(c)(4).  |
|           |   |              | Flare Assist Type = Non-assisted  |
|           |   |              | Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).  |
|           |   |              | Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm)   |
| FLARE1    | 40 CFR Part 63, Subpart A                             | 63A          | Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63.  |
| FUG-1     | 30 TAC Chapter 115, HRVOC<br>Fugitive Emissions       | R5713        | Title 30 TAC §115.780 Applicable = The fugitive unit does not contain a defined process or does not contain Highly Reactive VOC.  |
| FUG-1     | 30 TAC Chapter 115, Pet.<br>Refinery & Petrochemicals | R5313        | Title 30 TAC § 115.352 Applicable = Site is not a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process nor a natural gas/gasoline processing operation as defined in 30 TAC 115.10.   |
| FUG-1     | 40 CFR Part 63, Subpart I                             | 63I          | PROCESS TYPE = Fugitive unit does not contain one of the processes listed in 40 CFR § 63.190(b)(1) - (6).   |
| TANK3     | 30 TAC Chapter 115, Water<br>Separation               | R5131        | Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.  |
|           |   |              | Exemption = Water separator does not qualify for exemption.   |
|           |   |              | Emission Control Option = The compartment has all openings sealed and totally encloses the liquid contents with gauging and sampling devices that are vapor tight except when in use.   |
| DHVENT1   | 30 TAC Chapter 115, Vent Gas                          | R5121        | Alternate Control Requirement = Alternate control is not used.  |
|           | Controls  |              | Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.   |
|           |   |              | Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.  |
|           |   |              | Control Device Type = Smokeless flare   |
|           |   |              | Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.   |
|           |   |              | VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected. |
| OXIDIZER1 |   | R5121        | Alternate Control Requirement = Alternate control is not used.  |
|           | Controls  |              | Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.   |
|           |   |              | Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.  |
|           |   |              | Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).   |

| Unit ID | Regulation | Index Number | Basis of Determination*   |
|---------|------------|--------------|---|
|         |            |              | Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.   |
|         |            |              | VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected. |

<sup>\* -</sup> The "unit attributes" or operating conditions that determine what requirements apply

### **NSR Versus Title V FOP**

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

| NSR Permit  | Federal Operating Permit(FOP)                             |
|---|---|
| Issued Prior to new Construction or modification    | For initial permit with application shield, can be issued |
| of an existing facility                             | after operation commences; significant revisions require  |
|   | approval prior to operation.                              |
| Authorizes air emissions                            | Codifies existing applicable requirements, does not       |
|   | authorize new emissions                                   |
| Ensures issued permits are protective of the        | Applicable requirements listed in permit are used by      |
| environment and human health by conducting a        | the inspectors to ensure proper operation of the site as  |
| health effects review and that requirement for      | authorized. Ensures that adequate monitoring is in        |
| best available control technology (BACT) is         | place to allow compliance determination with the FOP.     |
| implemented.  |   |
| Up to two Public notices may be required.           | One public notice required. Opportunity for public        |
| Opportunity for public comment and contested        | comments. No contested case hearings.                     |
| case hearings for some authorizations.              |   |
| Applies to all point source emissions in the state. | Applies to all major sources and some non-major           |
|   | sources identified by the EPA.                            |
| Applies to facilities: a portion of site or         | One or multiple FOPs cover the entire site (consists of   |
| individual emission sources                         | multiple facilities)                                      |
| Permits include terms and conditions under          | Permits include terms and conditions that specify the     |
| which the applicant must construct and operate      | general operational requirements of the site; and also    |
| its various equipment and processes on a facility   | include codification of all applicable requirements for   |
| basis.  | emission units at the site.                               |
| Opportunity for EPA review for Federal              | Opportunity for EPA review, Affected states review, and   |
| Prevention of Significant Deterioration (PSD) and   | a Public petition period for every FOP.                   |
| Nonattainment (NA) permits for major sources.       |   |
| Permits have a table listing maximum emission       | Permit has an applicable requirements table and           |
| limits for pollutants                               | Periodic Monitoring (PM) / Compliance Assurance           |
|   | Monitoring (CAM) tables which document applicable         |
|   | monitoring requirements.                                  |
| Permits can be altered or amended upon              | Permits can be revised through several revision           |
| application by company. Permits must be issued      | processes, which provide for different levels of public   |
| before construction or modification of facilities   | notice and opportunity to comment. Changes that           |
| can begin.  | would be significant revisions require that a revised     |
|   | permit be issued before those changes can be operated.    |
| NSR permits are issued independent of FOP           | FOP are independent of NSR permits, but contain a list    |
| requirements.                                       | of all NSR permits incorporated by reference              |

### **New Source Review Requirements**

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

 $www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/old106 list/index 106. html \\$ 

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/oldselist/se\_index.html

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air\_status\_permits.html

| Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area. |                              |  |  |
|--|------------------------------|--|--|
| Authorization No.: 20907   | Issuance Date: 04/22/2013    |  |  |
| Permits By Rule (30 TAC Chapter 106) for   | the Application Area         |  |  |
| Number: 106.227  | Version No./Date: 09/04/2000 |  |  |
| Number: 106.263  | Version No./Date: 11/01/2001 |  |  |
| Number: 106.355  | Version No./Date: 11/01/2001 |  |  |
| Number: 106.454  | Version No./Date: 11/01/2001 |  |  |
| Number: 106.472  | Version No./Date: 09/04/2000 |  |  |
| Number: 106.478  | Version No./Date: 09/04/2000 |  |  |
| Number: 106.511  | Version No./Date: 09/04/2000 |  |  |

### **Emission Units and Emission Points**

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

### **Monitoring Sufficiency**

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental

monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

### Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

### **Compliance Assurance Monitoring (CAM):**

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

- 1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;
- 2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and
- 3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

| Unit/Group/Process Information                          |  |  |  |  |
|---|--|--|--|--|
| ID No.: COMP 14   |  |  |  |  |
| Control Device ID No.: COMP 14                          | Control Device Type: Catalytic Converter   |  |  |  |
| Applicable Regulatory Requirement                       |  |  |  |  |
| Name: 30 TAC Chapter 117, Subchapter B                  | SOP Index No.: R117  |  |  |  |
| Pollutant: CO   | Main Standard: § 117.310(c)(1)   |  |  |  |
| Monitoring Information                                  |  |  |  |  |
| Indicator: Fuel Consumption                             |  |  |  |  |
| Minimum Frequency: once per day                         |  |  |  |  |
| Averaging Period: n/a*                                  |  |  |  |  |
| Deviation Limit: Maximum fuel consumption: 900 mcf/day. |  |  |  |  |
| consumption and emission rates. In situations w         | to use performance tests, manufacturer's or historical data to establish a correlation between fuel here such a correlation exists, measuring, calculating and ether the emission limitation or standard is being met. |  |  |  |

\*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

| Unit/Group/Process Information  |  |  |
|---|--|--|
| ID No.: COMP 14   |  |  |
| Control Device ID No.: COMP 14  | Control Device Type: Catalytic Converter |  |
| Applicable Regulatory Requirement   |  |  |
| Name: 30 TAC Chapter 117, Subchapter B  | SOP Index No.: R117                      |  |
| Pollutant: CO   | Main Standard: § 117.310(c)(1)           |  |
| Monitoring Information  |  |  |
| Indicator: Inlet Gas Temperature  |  |  |
| Minimum Frequency: once per day   |  |  |
| Averaging Period: n/a*  |  |  |
| Deviation Limit: Minimum catalyst inlet temperature 450 deg F; Maximum catalyst inlet temperature 1350 deg F.   |  |  |
| Basis of CAM: A common way to reduce $NO_x$ emissions is by the use of a catalytic converter. A catalytic converter uses a catalyst such as platinum and rhodium to reduce the $NO_x$ emissions. When an $NO_x$ molecule contacts the catalyst, the catalyst frees oxygen and allows the formation of $N_x$ in lieu of $NO_x$ . Parameters that may be measured to determine control device performance include the outlet $NO_x$ concentration, the inlet temperature of the catalyst and the oxygen concentration in the exhaust gas. |  |  |

\*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

### **Periodic Monitoring:**

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

| Unit/Group/Process Information  |                                |  |
|---|--------------------------------|--|
| ID No.: TANK116   |                                |  |
| Control Device ID No.: N/A  | Control Device Type: N/A       |  |
| Applicable Regulatory Requirement   |                                |  |
| Name: 30 TAC Chapter 115, Storage of VOCs   | SOP Index No.: R5112           |  |
| Pollutant: VOC  | Main Standard: § 115.112(e)(1) |  |
| Monitoring Information  |                                |  |
| Indicator: Liquid Level   |                                |  |
| Minimum Frequency: At the end of each unloading operation   |                                |  |
| Averaging Period: n/a   |                                |  |
| Deviation Limit: A deviation will be noted if the liquid level falls below the fill pipe level.   |                                |  |
| Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. |                                |  |

| Unit/Group/Process Information            |                                |  |
|---|--------------------------------|--|
| ID No.: TANK116                           |                                |  |
| Control Device ID No.: N/A                | Control Device Type: N/A       |  |
| Applicable Regulatory Requirement         |                                |  |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112           |  |
| Pollutant: VOC                            | Main Standard: § 115.112(e)(1) |  |
|   |                                |  |

### **Monitoring Information**

Indicator: Structural Integrity of the Pipe
Minimum Frequency: Emptied and degassed

Averaging Period: n/a

Deviation Limit: If structural integrity inspection indicates need repairs, such repairs will be made prior to refilling the storage tank.

### Basis of monitoring:

The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.

| Unit/Group/Process Information             |                                |  |
|--|--------------------------------|--|
| ID No.: TANK3                              |                                |  |
| Control Device ID No.: N/A                 | Control Device Type: N/A       |  |
| Applicable Regulatory Requirement          |                                |  |
| Name: 30 TAC Chapter 115, Water Separation | SOP Index No.: R5131           |  |
| Pollutant: VOC                             | Main Standard: § 115.132(a)(1) |  |
| Monitoring Information                     |                                |  |
| Indicator: VOC Concentration               |                                |  |
| Minimum Frequency: Annually                |                                |  |
| Averaging Period: n/a*                     |                                |  |

Deviation Limit: 500 ppmv if leak interface other than a seal around a shaft that passes through a cover opening and 10,000 ppmv around a shaft that passes through a cover opening.

### Basis of monitoring:

It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.

\*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

| Unit/Group/Process Information                       |                                |  |
|--|--------------------------------|--|
| ID No.: TANK3  |                                |  |
| Control Device ID No.: N/A                           | Control Device Type: N/A       |  |
| Applicable Regulatory Requirement                    |                                |  |
| Name: 30 TAC Chapter 115, Water Separation           | SOP Index No.: R5131           |  |
| Pollutant: VOC                                       | Main Standard: § 115.132(a)(1) |  |
| Monitoring Information                               |                                |  |
| Indicator: Visual Inspection                         |                                |  |
| Minimum Frequency: Monthly                           |                                |  |
| Averaging Period: n/a                                |                                |  |
| Deviation Limit: A gap or crack in a sealed opening. |                                |  |
| Basis of monitoring:                                 |                                |  |

It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and a recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.

### **Compliance Review** 1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on **December 7, 2016**.

Site rating: 2.86 / Satisfactory Company rating: 2.86 / Satisfactory (High < 0.10; Satisfactory  $\ge 0.10$  and  $\le 55$ ; Unsatisfactory > 55) Site/Permit Area Compliance Status Review 1. Were there any out-of-compliance units listed on Form OP-ACPS?......No

### Available Unit Attribute Forms

- OP-UA1 Miscellaneous and Generic Unit Attributes
- OP-UA2 Stationary Reciprocating Internal Combustion Engine Attributes
- OP-UA3 Storage Tank/Vessel Attributes
- OP-UA4 Loading/Unloading Operations Attributes
- OP-UA5 Process Heater/Furnace Attributes
- OP-UA6 Boiler/Steam Generator/Steam Generating Unit Attributes
- OP-UA7 Flare Attributes
- OP-UA8 Coal Preparation Plant Attributes
- OP-UA9 Nonmetallic Mineral Process Plant Attributes
- OP-UA10 Gas Sweetening/Sulfur Recovery Unit Attributes
- OP-UA11 Stationary Turbine Attributes
- OP-UA12 Fugitive Emission Unit Attributes
- OP-UA13 Industrial Process Cooling Tower Attributes
- OP-UA14 Water Separator Attributes
- OP-UA15 Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
- OP-UA16 Solvent Degreasing Machine Attributes
- OP-UA17 Distillation Unit Attributes
- OP-UA18 Surface Coating Operations Attributes
- OP-UA19 Wastewater Unit Attributes

- OP-UA20 Asphalt Operations Attributes
- OP-UA21 Grain Elevator Attributes
- OP-UA22 Printing Attributes
- OP-UA24 Wool Fiberglass Insulation Manufacturing Plant Attributes
- OP-UA25 Synthetic Fiber Production Attributes
- OP-UA26 Electroplating and Anodizing Unit Attributes
- OP-UA27 Nitric Acid Manufacturing Attributes
- OP-UA28 Polymer Manufacturing Attributes
- OP-UA29 Glass Manufacturing Unit Attributes
- OP-UA30 Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
- OP-UA31 Lead Smelting Attributes
- OP-UA32 Copper and Zinc Smelting/Brass and Bronze Production Attributes
- OP-UA33 Metallic Mineral Processing Plant Attributes
- OP-UA34 Pharmaceutical Manufacturing
- OP-UA35 Incinerator Attributes
- OP-UA36 Steel Plant Unit Attributes
- OP-UA37 Basic Oxygen Process Furnace Unit Attributes
- OP-UA38 Lead-Acid Battery Manufacturing Plant Attributes
- OP-UA39 Sterilization Source Attributes
- OP-UA40 Ferroalloy Production Facility Attributes
- OP-UA41 Dry Cleaning Facility Attributes
- OP-UA42 Phosphate Fertilizer Manufacturing Attributes
- OP-UA43 Sulfuric Acid Production Attributes
- OP-UA44 Municipal Solid Waste Landfill/Waste Disposal Site Attributes
- OP-UA45 Surface Impoundment Attributes
- OP-UA46 Epoxy Resins and Non-Nylon Polyamides Production Attributes
- OP-UA47 Ship Building and Ship Repair Unit Attributes
- OP-UA48 Air Oxidation Unit Process Attributes
- OP-UA49 Vacuum-Producing System Attributes
- OP-UA50 Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur
- **Recovery Plant Attributes**
- OP-UA51 Dryer/Kiln/Oven Attributes
- OP-UA52 Closed Vent Systems and Control Devices
- OP-UA53 Beryllium Processing Attributes
- OP-UA54 Mercury Chlor-Alkali Cell Attributes
- OP-UA55 Transfer System Attributes
- OP-UA56 Vinyl Chloride Process Attributes
- OP-UA57 Cleaning/Depainting Operation Attributes
- OP-UA58 Treatment Process Attributes
- OP-UA59 Coke By-Product Recovery Plant Attributes
- OP-UA60 Chemical Manufacturing Process Unit Attributes
- OP-UA61 Pulp, Paper, or Paperboard Producing Process Attributes
- OP-UA62 Glycol Dehydration Unit Attributes
- OP-UA63 Vegetable Oil Production Attributes